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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,130	08/28/2003	Brian C. Shoemaker	4088-P03270US	8187
110	7590	01/10/2006	EXAMINER	
DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307			KASTLER, SCOTT R	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/651,130

Applicant(s)

SHOEMAKER, BRIAN C.

Examiner

Scott Kastler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 10, 12-14, 16 and 18-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 12-14, 16, 18-22, 24, 25, 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 2-6, 23 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Objections

Claim 26 is objected to because of the following informalities: Instant claim 26 recites "The vacuum heat treating furnace of claim 23", however, claim 23 does not claim a vacuum heat treating furnace, but rather a check valve assembly for use in a vacuum heat treating furnace, thereby rendering claim 26 inconsistent with claim 23, from which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-5, 23 and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Moller'991. Moller'991, in the embodiments of figures 1-3 for example, teaches a check valve (21) including a flap (31) fitting within a chamber formed in the valve body, where the flap, valve assembly and the shaft (33) can be made of a refractory material such as molybdenum or graphite (see col. 3 lines 50-65 for example) where the valve is employed on a cooling gas nozzle in the hot zone of a vacuum heat treating furnace (as shown in the embodiment of figure 1), thereby showing all aspects of the above claims.

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Claims 2-5, 23 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Moller'566. Moller'566, in the embodiments of figures 1-4 for example, teaches a check valve (21) including a flap (31) fitting within a chamber formed in the valve body, where the flap, valve assembly and the shaft (33) can be made of a refractory material such as molybdenum or graphite (see col. 5 lines 50-63 for example) where the valve is employed on a cooling gas nozzle in the hot zone of a vacuum heat treating furnace (as shown in the embodiment of figure 1), thereby showing all aspects of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Moller'566 or Moller'991. As applied to claim 1 above, each of Moller'566 and Moller'911 show all aspects of the above claims except the dimensioning of the flap (31) so that it fits entirely within the chamber of the valve (the flaps of each of Moller'566 and Moller'991 extend somewhat outwardly of the chamber when the valve is in the open position) however, the flaps of each of Moller'566 and Moller'991 operate in substantially the same manner with substantially the same stated results as the flaps of the instant claims. It has been well settled that where a claimed component is shown by the prior art, and operates in substantially the same manner with substantially the same results, motivation to alter the size, shape or proportions of

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the component to any equally useful size or proportion would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. See MPEP 2144.04 IV A and B. In the instant case, since the flaps of each of Moller'566 and Moller'991 operate in substantially the same manner with substantially the same stated results, motivation to alter the size, proportions or configuration of the flaps of either of Moller'991 or Moller'556 to any other equally useful shape, size or proportion, including one that would fit entirely within the chamber of valve (21) when the valve is in the open position, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Allowable Subject Matter

Claims 10, 12-14, 16, 18-22, 24, 25, 27 and 28 are allowed at least because none of the cited prior art shows or fairly suggests locating the flap (31 in the Moller patents) within a chamber formed in the inlet portion (25 of the Moller patents) thereby allowing for the flap to stay entirely within the valve body at all times.

Response to Arguments

Applicant's arguments and amendments, see pages 8-13, filed on 11/18/2005, with respect to claims 10, 12-14, 16, 18-22, 24, 25, 27 and 28 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

Applicant's arguments filed on 11/18/2005 with respect to claims 2-6, 23 and 26 however, have been fully considered but they are not persuasive. Applicant's argument that the Moller patents do not teach locating the flap (31) at an inlet end of the valve (16) is not

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persuasive with respect to instant claims 2-6, 23 and 26 because these claims are directed to the valve itself, and the valve could be operated in a manner in which end (23) serves as an inlet, such as in an environment where the furnace is under a higher than ambient pressure and the valve is employed to inject a solid material (such as a wire feed) into the furnace. It has been well settled that where, as in the instant case, an apparatus disclosed by the applied prior art could be employed in a manner claimed, whether or not the claimed manner or method of use is recited or even desired by the applied prior art, then the manner or method of use of an apparatus cannot be relied upon to fairly further distinguish claims to the apparatus itself. See MPEP 2114.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

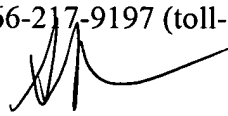
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler
Primary Examiner
Art Unit 1742

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